

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 91-342-G - ORDER NO. 91-971
NOVEMBER 1, 1991

IN RE:	Application of South Carolina)	ORDER APPROVING
	Electric & Gas Company for Approval)	ADOPTION OF
	of Weather Normalization Adjustment)	WEATHER NORMALIZATION
	and for Elimination of Certain Rate)	ADJUSTMENT AND FOR
	Schedules.)	ELIMINATION OF
)	CERTAIN RATE
)	SCHEDULES

I.

INTRODUCTION

This matter is before the Public Service Commission of South Carolina (the Commission) on the Application of South Carolina Electric & Gas Company (SCE&G or the Company), whereby the Company requests the Commission to approve the adoption of a Weather Normalization Adjustment (WNA) to be applied to its Gas Rates 31 and 32, Small General Service and Residential Gas Service, respectively, for firm gas service effective as of November 1, 1991, for implementation in the Company's billing cycles beginning in the month of December 1991. In addition, the Company requests the Commission to approve the elimination of certain rate schedules for natural gas service. The Company's July 26, 1991, Application was filed pursuant to 26 S.C. Code Ann., Reg. 103-403(B) (1976, as amended).

By letter dated August 1, 1991, the Commission's Executive

Director instructed the Company to publish a prepared Notice of Filing and Hearing, once a week for two consecutive weeks in newspapers of general circulation in the Company's affected service areas in South Carolina. The Notice of Filing and Hearing indicated the nature of the Company's Application and advised all interested parties of the manner and time in which to file appropriate pleadings. The Company was likewise required to notify directly all customers affected by the proposed changes. The Company was further directed to file proof of publication and proof of notification of the above on or before August 16, 1991. The Company duly filed said affidavit and certification.

A Petition to Intervene was filed on behalf of Steven W. Hamm, Consumer Advocate for the State of South Carolina (the Consumer Advocate). Testimony was subsequently filed by Warren A. Darby on behalf of the Company and James S. Stites and Norbert M. Thomas on behalf of the Commission Staff. (All testimony and exhibits were thereafter stipulated into the record at the time of the hearing).

Thereafter, in accordance with the applicable provisions of law and the Commission's Rule of Practice and Procedure, a public hearing relative to the matters asserted in the Company's Application was commenced on October 24, 1991. The Honorable Marjorie Amos-Frazier presided. Mark W. Buyck, Jr., Esquire, and Robert T. Bockman, Esquire, represented the Company. Raymon E. Lark, Jr., Esquire, represented the Consumer Advocate. F. David Butler, Esquire, represented the Commission Staff.

With regard to the proposed adoption of a weather

normalization adjustment, the testimony of Warren A. Darby shows that in recent years, SCE&G has experienced substantial fluctuations in its firm gas sales, attributable to variations in temperature and their effects on the Company's load, much of which is highly sensitive to changes in temperature during the winter heating season. Such variations in firm gas sales have a significant effect on the stability of the Company's operating revenues and earnings. Furthermore, deviations from normal temperatures produced dramatic fluctuations in customers' monthly bills. In order to offset the effects of unusually cold or warm weather for the Company and its firm customers, the Company proposes the adoption of a weather normalization adjustment to apply to its base rates to compensate for deviations from normal weather.

The Company's proposal for the adoption of WNA is not intended to effect the Company's overall revenue requirements as determined by the Commission in Order No. 89-1074, issued in Docket No. 89-245-G, on November 30, 1989. The WNA was proposed to remove the necessity for a general rate increase which, according to the Company, would have been justified by the abnormal weather experience in the most recent period. By request for approval of the weather normalization adjustment, the Company seeks the opportunity to charge its customers based on normal weather usage. According to Mr. Darby, residential and small general service rate schedules are impacted by the WNA because the usage by these classes is sensitive to weather conditions.

Under the Company's proposal, the WNA will apply only to the billing months of November through April. The customer will see a downward adjustment reflected on his bill if weather conditions are colder than normal weather and the reverse during warmer than normal conditions. Under the Company's proposal, the WNA applies only to the portion of the rate which covers costs other than gas costs.

Company witness Darby also testified with regard to the Company's request to eliminate certain rate schedules. Darby stated that this is consistent with the provisions of our Order No. 90-960 in which the Commission approved SCANA Corporation's acquisition of Peoples Gas Company (Peoples), former customers of Peoples under the Company's proposal will be assigned to SCE&G Rate Schedules 31 (Small Firm General Service), 32 (Residential) and 34 (Large Firm General Service), respectively, to bring about rate consolidation. In addition, the Company proposes to eliminate the former Peoples Rate Schedules 1, 3, 4, and 5, and place customers on these rates on the appropriate SCE&G Rate Schedules 31, 32, and 34. The Company states that this results in a net revenue reduction of \$340,368. Further, the Company states that the average residential customer using 600 therms annually will realize a decrease of approximately \$23 or 5%, based on their current rate.

In addition, the Company requests withdrawal of rate schedules 8, 9, 10, 11, 13, T-1, and T-2 approved by the Commission in Order No. 90-1060, dated November 14, 1990. The Company states that there are no customers currently served or anticipated to be served

on these schedules. Further, the Company proposes the withdrawal of the purchased gas adjustment rider applicable to Rates 1, 3, 4, 5, 10, 11, and 13. Darby states that the Company does not propose any changes to the existing general terms and conditions as presently approved by the Commission applicable to Rate Schedules 31, 32, 34, and 35. The Rules and Regulations applicable to customers formally served by Peoples should remain and be applicable to Rates 6 and 7 only. SCE&G proposes that when current service agreements expire for customers served under Rate Schedules 6 and 7, that new service agreements should be entered into under other pricing provisions.

On the date of the hearing, all three parties--the Company, the Commission Staff and the Consumer Advocate--presented to this Commission Stipulations entered into and signed by representatives of all the parties. The Stipulations were as follows:

A. That, effective on and after the date of any order of this Commission approving the within Stipulations, the rate of return on common equity of 12.75%, previously approved in Order No. 89-1074, dated November 30, 1989, will be adjusted to 12.25% for SCE&G's firm natural gas operations.

B. That the Staff and the Consumer Advocate will not oppose the adoption of the WNA for SCE&G's gas operations and the elimination or withdrawal of the gas rate schedules, as proposed in the Company's Application, dated July 26, 1991, in Docket No. 91-342-G, effective as of November 1, 1991, for implementation in the Company's December 1991 billing cycles.

C. That the implementation of the WNA will be effective for three years, beginning in November 1991. The WNA will be subject to annual docketed review by the Commission including discovery, and it will be subject to modification and/or termination after each winter period at the discretion of the Commission.

D. That, in the implementation of the WNA, the Company will use the normal heating degree days published by the National Oceanic and Atmospheric Administration ("NOAA"). That information is based on a thirty-year period, recalculated each decade. Until NOAA updates the presently published normal heating degree days, the Company's WNA will use the information for the period 1961-90 contained in Attachment A, attached hereto and incorporated herein by reference. (This attachment appears as Appendix B to this Order).

E. That, upon the Commission's approval of the proposed WNA, the Company will begin an information program designed to advise its customers of the WNA and its operation. The Company will continue such program through the first year of operation of the WNA, and the Company will advise the Commission of all aspects of the informational program.

F. That the Company will maintain its books and records in sufficient detail to enable the Commission to determine the revenue impact of the operation of the WNA. The Company will file monthly reports to enable the Commission to make such

determination.

G. That SCE&G will not propose the adoption of a weather normalization adjustment, similar to the WNA to be approved in Docket No. 91-342-G, for its retail electric operations which would be effective prior to November 1, 1994.

H. That SCE&G will propose the adoption of a cost of gas of 38.375 cents per therm for its firm rate tariffs in Docket No. 91-008-G, effective November 1, 1991. The proposed cost of gas represents a reduction of seven and one-fourth cents per therm in the cost of gas previously approved by the Commission.

I. That the Parties agree that, for the historic period at issue in Docket No. 91-008-G (i.e., September 1990 - August 1991), SCE&G's gas purchasing practices and the recovery of its gas costs were undertaken in accordance with tariffs and rate schedules approved by the Commission for South Carolina Pipeline Corporation and SCE&G. The Consumer Advocate and the Commission Staff agree that they will not challenge the fact that SCE&G purchased its gas and recovered its gas costs in accordance with such approved tariffs and rate schedules during that historic period.

J. That the Parties agree that these Stipulations will not affect the implementation of the provisions contained in paragraph 3 of the Settlement Agreement, dated May 6, 1991, and executed by the Consumer Advocate, the Commission and Peoples Natural Gas Company of South Carolina, and entered in

Carolina Supreme Court Docket No. 90-757).

K. That no base rates to any existing customer served on Rate Schedules 6 or 7 shall increase as a result of these Stipulations for a period of 18 months from the date of any order of the Commission approving the within Stipulations.

L. That the agreement of the Consumer Advocate and the Commission Staff to these Stipulations does not constitute waiver of their agreement for proper inquiry into the allocation procedures for the entities formerly known as Peoples Natural Gas Company of South Carolina and related matters, including the consolidation of certain propane operations which are now affiliated with, or owned by, SCANA Corporation.

M. The Parties agree to file the within Stipulations for formal approval by the Commission not later than the public hearing now scheduled in Docket No. 91-008-G for October 24, 1991. The Parties agree to cooperate in the submission of these Stipulations in that proceeding and in Docket No. 91-342-G for the purpose of the Commission's consideration of the Stipulations.

II.

FINDINGS OF FACT

Upon full consideration of the Company's verified Application, the evidence presented at the hearing, the Stipulations of the parties, and the applicable law, the Commission makes the following findings of fact and conclusions of law:

1. The Company is a public utility operating in South Carolina, where it is engaged in the purchase, distribution, and sale of gas to the public for compensation.

2. The Company's present rates and charges were set out in Order No. 89-1074, issued in Docket No. 89-245-G on November 30, 1989.

3. The Company presently serves approximately 222,000 gas customers. The Company's distribution system consists of approximately 5,100 miles of mains located in 96 cities and towns and 32 counties in South Carolina.

4. The present firm Gas Rates 31, 32, 34, and 35 now in effect were approved by the Commission in Order No. 91-191, dated March 12, 1991. For facilities and territories previously certificated to Peoples Gas, the present Gas Rates 1, 3, 4, 5, 6, and 7 now in effect were approved by the Commission on May 28, 1991, and reflect the settlement approved by the South Carolina Supreme Court.

5. By its Application, the Company seeks Commission approval of a weather normalization adjustment (WNA) and the elimination of certain rate schedules.

6. That the Stipulation agreed to by the parties and entered into evidence as Hearing Exhibit 1 is fair, reasonable and should be adopted by this Commission.

7. That effective on and after the date of this Order, the rate of return on common equity of 12.75% previously approved in Order No. 89-1074, dated November 30, 1989, will be adjusted to

12.25% for SCE&G's firm natural gas operation.

8. That since under the terms of the Stipulations, the Staff and Consumer Advocate do not oppose this Commission's adoption of the weather normalization adjustment for SCE&G's gas operations and the elimination or withdrawal of the specified gas rates schedules as proposed in the Company's Application, dated July 26, 1991, and that since the Commission has examined the evidence submitted by all the parties in the matter, the Commission believes that both the weather normalization adjustment, as described above, and the elimination of the schedules as proposed should be approved.

9. That the weather normalization adjustment should be calculated as per the formula included as an exhibit to the direct testimony of Warren A. Darby in this proceeding and entered into the evidence as Hearing Exhibit 2. The Commission hereby adopts this exhibit as Appendix A to this Order and includes said Appendix herein as fully as if repeated herein verbatim as part of this Commission's Order.

10. That the weather normalization adjustment will apply only to the billing months of November through April and shall apply only to the portion of the rate which recovers cost other than gas costs as per the formula.

11. That the implementation of the weather normalization adjustment will be effective for three years beginning in November 1991 for billing periods beginning December 1, 1991. The weather normalization adjustment will be subject to annual docketed review by the Commission including discovery and it will be subject to

modification and/or termination after each winter period at the discretion of the Commission.

12. That in the implementation of the WNA, the Company will use the normal heating degree days published by the National Oceanic and Atmospheric Administration (NOAA). That information is based on a thirty-year period recalculated each decade. Until NOAA updates the presently published normal heating degree days, the Company's WNA will use the information for the period 1961-90 contained in Appendix B attached hereto and incorporated herein by reference.

13. That the Company should begin an information program immediately, designed to advise its customers of the WNA and its operation. The Company should continue such program through the first year of operation of the weather normalization adjustment, and the Company should advise the Commission of all aspects of the informational program.

14. The Company should maintain its books and records in sufficient detail to enable the Commission to determine the revenue impact of the operation of the weather normalization adjustment. The Company should file monthly reports to enable the Commission to make such determination.

15. That the Company shall be allowed to eliminate Rate Schedules 1, 3, 4, and 5 and place customers on the appropriate Rate Schedules 31, 32, and 34.

16. The Company should be allowed to withdraw Rate Schedules 8, 9, 10, 11, 13, T-1 and T-2 as well as the Purchased Gas

Adjustment Rider applicable to Rates 1, 3, 4, 5, 10, 11 and 13.

17. The Company should not change the existing general terms and conditions as presently approved by the Commission applicable to Rate Schedules 31, 32, 34, and 35, except that the Rules and Regulations applicable to customers formally served by Peoples should remain and be applicable to Rates 6 and 7 only.

18. That as per the stipulation, no base rates to any existing customers served on Rate Schedules 6 or 7 shall increase for a period of 18 months from the date of this Order.

III.

CONCLUSIONS OF LAW

1. That the request of South Carolina Electric & Gas Company to institute a weather normalization adjustment effective November 1, 1991, for billing cycles beginning December 1, 1991, and the elimination of certain rate schedules as stated above are hereby approved.

2. That the terms of the Stipulations entered into by the parties on October 15-16, 1991, should be approved as fair, just, and equitable.

IT IS THEREFORE ORDERED:

1. That the rate of return on common equity of 12.75% previously approved in Order No. 89-1074, dated November 30, 1989, shall be adjusted to 12.25% for SCE&G's firm natural gas operations as of the date of this Order.

2. That the weather normalization adjustment as proposed by the Company is hereby approved, effective as of November 1, 1991,

for implementation in the Company's December 1991 billing cycles.

3. That the weather normalization adjustment will be operated as per the formula stated in Appendix A and the Company will use the normal heating degree days published by the National Oceanic and Atmospheric Administration based on a thirty-year average as stated above.

4. That the implementation of the weather normalization adjustment will be effective for three years beginning in November 1991 and that the WNA will be subject to annual docketed review by the Commission including discovery and will be subject to modification and/or termination after each winter period at the discretion of the Commission.

5. That the Company shall begin an information program designed to advise its customers of the WNA and its operation. Said program shall continue through the first year of operation of the WNA and the Company shall advise the Commission of all aspects of the informational program. The Company shall maintain its books and records in sufficient detail to enable the Commission to determine the revenue impact of the operation of the WNA and shall file monthly reports to enable the Commission to make such determination.

6. That the Company may eliminate Rate Schedules 1, 3, 4 and 5, and place customers on these rates on the appropriate Rate Schedules 31, 32, and 34.

7. That the Company may withdraw Rate Schedules 8, 9, 10, 11, 13, T-1 and T-2 and the Purchased Gas Adjustment Rider

applicable to Rates 1, 3, 4, 5, 10, 11 and 13.

8. That no base rate to any existing customer served on Rate Schedule 6 or 7 shall increase for a period of eighteen months from the date of this Order.

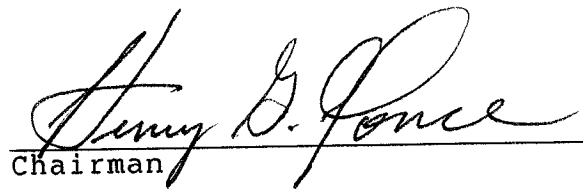
9. That all other provisions of the Stipulation not heretofore mentioned are hereby made a part of this Order.

10. That the new rate schedules and tariff sheets should be filed reflecting the findings herein within five (5) days of the Company's receipt of this Order.

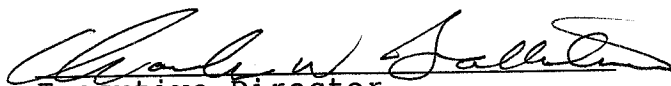
11. That this Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

VICE Chairman



ATTEST:


Executive Director

(SEAL)

SOUTH CAROLINA ELECTRIC & GAS COMPANY

WEATHER NORMALIZATION ADJUSTMENT

DOCKET NO. 91-342-G

Applicability

The Weather Normalization Adjustment (WNA) is applicable to and is a part of the Company's firm gas rate schedules 31 and 32. The commodity charges per therm for each billing cycle during the billing months of November through April will be increased or decreased in an amount to the nearest one-thousandth of a cent, as derived by the following formula:

$$\text{WNA} = \frac{R \times (\text{HSF} \times (\text{NDD} - \text{ADD}))}{\text{BL} + (\text{HSF} \times \text{ADD})}$$

Where:

- WNA = Weather Normalization Adjustment factor for any particular rate schedule expressed in dollars per therm.
- R = Weighted average base rate (approved rate less cost of gas) for any particular rate schedule.
- HSF = Heat Sensitive Factor (relationship between consumption and ADD) for any particular rate schedule utilized by the Commission in determining normalized revenues.
- NDD = Normal billing cycle heating degree days utilized by the Commission in determining normalized revenues.
- ADD = Actual billing cycle heating degree days.
- BL = Base load sales for any particular rate schedule utilized by the Commission in determining normalized revenues.

WNA DESCRIPTION:

The Weather Normalization Adjustment Factor is calculated by multiplying the weighted average non-gas cost base rate (denoted by R in the formula) times the heat sensitive factor (HSF), as determined in the weather normalization procedure times the deviation from normal weather and then this result is divided by the expected actual consumption. The formula computes the marginal change in gas rates that is required to recover the Company's fixed costs from the actual sales associated with abnormal weather. The factor for each rate and billing cycle is based solely on the actual heating degree days in each individual billing period and the deviation from the normal heating degree days for the period. All of the other values in the formula would be fixed at the time the Commission approved the WNA Clause for the Company. Those factors would remain in effect until a change is approved by this Commission.

COMPONENTS IN THE FORMULA:

R

The R value is an average rate per therm calculated for each applicable rate schedule by weighting the non-gas cost rate by block.

HSF and BL

The heat sensitive factor (HSF) and baseload (BL) are statistical parameters that are calculated from a regression analysis that measures the relationship between usage (measured in therms) and heating degree days. Usage on sales is the dependent variable and weather as measured by actual heating degree days is the independent variable in the equation.

The term base load represents the intercept or the amount of consumption unrelated to heating degree days. The heat sensitive factor is the coefficient of heating degree days in the regression equation and represents the average change in sales occurring for a one degree change in heating degree days.

Page 5 shows the numerical values for these components.

NDD

Normal degree days are used to represent weather patterns that are "typical" for a given territory. Heating degree days for a single day are determined by taking the average of the high and low temperature for the day and subtracting it from 65 degrees. The Company proposes to develop normal heating degree days for SCE&G's service area by calculating the average of daily heating degree days for the thirty year period 1961-1990. A thirty year basis is consistent with the National Oceanic and Atmospheric Administration (NOAA) standard.

ADD

The actual degree days in the formula are based on the actual weather conditions experienced during the days in any particular billing cycle.

SUMMARY:

The weighted average base rate, heat sensitive factor, base load and normal heating degree days will all be determined at the time of approval of a WNA mechanism for purposes of calculating the WNA factor. The only variable that changes by cycle is the actual heating degree days. When actual heating degree days are greater than normal heating degree days, the WNA factor results in a per therm credit applicable to the customers' bills. When actual heating degree days are less than normal heating degree days, the WNA factor results in an addition to customers' bills.

The WNA will have no effect on the purchased gas cost portion of the customer's bill.

SOUTH CAROLINA ELECTRIC & GAS COMPANY
CALCULATION OF WEATHER NORMALIZATION ADJUSTMENT COMPONENTS

FIRM RESIDENTIAL SERVICE - RATE 32

$$R = .30298 (\$.21899) + .69702 (\$.28426)$$

$$= \$.06635 + \$.19813$$

$$= \$.26448$$

$$\text{HSF} = .218 \text{ therms}$$

$$\text{BL} = 11.8 \text{ therms}$$

FIRM GENERAL SERVICE - RATE 31

$$R = .24734 (\$.22550) + .75266 (\$.29141)$$

$$= \$.05578 + \$.21933$$

$$= \$.27511$$

$$\text{HSF} = .528 \text{ therms}$$

$$\text{BL} = 99.1 \text{ therms}$$

SOUTH CAROLINA ELECTRIC & GAS COMPANY

NORMAL HEATING DEGREE DAYS

SIX MONTH WINTER SEASON

APPENDIX B
DOCKET NO. 91-342-G
ORDER NO. 971

	november	december	january	february	march	april	season totals
	61-90	61-90	61-90	61-90	61-90	61-90	61-90
	average	average	average	average	average	average	average
1	3.6	15.4	15.1	16.4	13.6	5.3	69.4
2	4.3	14.7	18.4	14.8	13.2	4.9	70.3
3	5.1	14.1	18.6	17.6	11.8	5.6	72.7
4	6.0	14.6	18.5	19.0	10.3	4.5	72.7
5	7.4	15.5	20.5	20.2	9.1	5.8	78.4
6	8.2	15.4	19.1	18.0	11.0	6.7	78.3
7	8.2	15.6	17.5	18.9	12.6	6.8	79.7
8	8.4	15.4	20.3	19.8	13.0	5.2	82.1
9	7.7	15.4	20.9	20.7	12.3	5.0	81.9
10	6.7	15.4	21.3	20.0	11.6	6.6	81.5
11	8.3	14.6	22.1	17.8	10.6	5.4	78.7
12	8.9	14.0	22.5	17.5	7.5	4.3	74.6
13	11.2	14.2	22.5	18.2	7.3	3.4	76.7
14	12.1	15.9	22.3	15.8	7.7	3.5	77.3
15	11.3	16.1	21.8	13.6	8.9	2.9	74.4
16	9.3	16.7	22.2	14.0	8.3	4.4	74.9
17	9.4	18.7	20.7	16.1	10.1	4.0	79.1
18	8.6	19.3	18.9	17.1	10.4	2.9	77.2
19	8.9	18.1	18.6	14.1	7.2	2.8	69.5
20	10.0	16.0	19.6	15.2	6.9	3.2	70.9
21	11.4	18.3	20.1	15.2	7.9	2.3	75.2
22	13.0	18.4	19.7	14.4	10.3	1.6	77.4
23	12.0	17.3	17.4	14.1	10.3	1.8	72.7
24	10.6	16.2	16.6	12.9	8.8	1.9	67.0
25	11.9	18.1	16.1	15.7	8.2	2.6	72.5
26	11.4	19.1	18.0	17.9	8.4	2.0	76.7
27	7.2	18.2	19.5	15.8	7.8	1.7	70.2
28	8.8	15.3	20.3	13.7	6.6	1.7	66.3
29	12.4	17.0	18.7	0.0	4.5	2.3	54.9
30	15.4	16.2	17.3	0.0	4.3	1.3	54.6
31	0.0	14.3	17.9	0.0	5.6	0.0	37.8
TOTAL	277.3	503.3	602.5	464.0	286.0	112.3	2245.4